

## Abstract

Method and device for reducing the crest factor of a signal

5 In order to change and, in particular, reduce the crest factor in a signal which is used, in particular, for data transmission by the method of discrete multitone modulation, it is known to store the signal in the form of individual sampling values in a signal vector  $(y)$ , as a  
10 function of which a correction vector  $(\Delta y)$  is calculated for superimposition of the signal vector  $(y)$ . The correction vector  $(\Delta y)$  is calculated here as a function of a maximum element of the signal vector  $(y)$  and reduces this maximum value in a targeted manner. In order to be able to  
15 reduce new maximum values of the signal vector  $(y)$  occurring after the reduction of a first maximum value, according to the invention the correction vector is windowed, so it acts with differing strength on different sections of the signal vector  $(y)$  or in that with the  
20 windowed correction vector  $(\Delta y)$  individual maximum values in the signal vector  $(y)$  can be reduced in a targeted manner. Therefore, correction vectors  $(\Delta y)$  can be superimposed a plurality of times in succession in the signal vector  $(y)$  in order to reduce iteratively large  
25 values in the signal vector  $(y)$ , if in the consecutively used correction vectors  $(\Delta y)$  the window area is at another respective position.

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(Fig. 1)